INORGANICA CHIMICA ACTA VOLUME 217, NUMBERS 1–2, MARCH 1994

Contents

Preliminary Communications

Synthesis and complexation behaviour of a double-armed crown thioether ligand. 1
F. Neve and M. Ghedini (Arcavacata di Rende, CS, Italy)

'Insulation' to lattice effects on quadrupole splitting in the Mössbauer spectra of salts of $[Fe_4S_4(Cys)_4]^{2-}$, a ferredoxin model 3
D.J. Evans and M.S. Newton (Brighton, UK)

Articles

A seven-spin cluster formed by an alkyl nitronyl nitroxide biradical and copper(II): crystal structure and magnetic properties 7
A. Caneschi, L. David, F. Ferraro, D. Gatteschi (Florence, Italy) and A.C. Fabretti (Modena, Italy)

A novel tetranuclear iodoargentate(I) ion, $[Ag_4I_8]^{4-}$, with a cubane-type core 15
S. Olson, G. Helgesson and S. Jagner (Göteborg, Sweden)

Hydrolytic cleavage of peptides by palladium(II) complexes is enhanced as coordination of peptide nitrogen to palladium(II) is suppressed 21
L. Zhu and N.M. Kostić (Ames, IA, USA)

Electrochemical investigation of the electron-poor/precise ($n=5/6$) complexes $[Fe_2(CO)_n(\mu\text{-}PR_2)(\mu\text{-}PR'_2)]$ ($n=5$, $R=R'=Bu^t$; $n=6$, $R=R'=Ph$; $R=Bu^t$, $R'=Ph$; $R=Bu^t$, $R'=Cy$). EPR study of the radical anion $[Fe_2(\mu\text{-}PBu^t_2)_2(CO)_5]$ 29
J.G.M. van der Linden (Nijmegen, Netherlands), J. Heck (Hamburg, Germany), B. Walther and H.-C. Böttcher (Halle, Saale, Germany)

Interaction of the lysine side chain amino group with Cu^{II} in (glycyl-L-lysine^{2-})Cu 33
G. Fusch, E.C. Hillgeris and B. Lippert (Dortmund, Germany)

Magnetic properties and crystal structure of {μ-pyrazine}bis[(aqua)(2,6-xylylaminodiacetato)copper(II)]. A pyrazine-bridged dinuclear copper(II) complex 39
J. Suárez-Varela, E. Colacio (Granada, Spain), A. Romerosa (Almeria, Spain), J.C. Avila-Rosón, M.A. Hidalgo and J. Romero (Granada, Spain)

Syntheses of dinuclear gold(I) ring complexes containing 1,1-dicyanoethene-2,2-dithiolate-*S*,*S* and bis(diphosphines) as bridging ligands. X-ray crystal structure of $[Au_2\mu\text{-}(i\text{-}MNT)\mu\text{-}(dppee)]$. 45
R.M. Dávila, A. Elduque, R.J. Staples, M. Harlass and J.P. Fackler, Jr. (College Station, TX, USA)

Bis(2-diphenylphosphinoethyl)phenylphosphineruthenium(II) complexes of amino acids and dipeptides. 51
W.S. Sheldrick and K. Brandt (Bochum, Germany)

Spectroscopic investigation of dichloro and hydrazido(2−) derivatives of bis(dithiocarbamato)dioxomolybdenum(VI) compounds. Crystal and molecular structure of bis(diisobutyldithiocarbamato) (*N*,*N*-dimethylhydrazido(2−)-*N'*)oxo-molybdenum(VI) 61
A.C. Stergiou, S. Bladenopoulou and C. Tsiamis (Thessaloniki, Greece)

Spectroscopic and structural studies on volatile gallium β-diketonates as potential precursors for MOCVD 71
B. Ballarin, G.A. Battiston, F. Benetollo, R. Gerbasi, M. Porchia, D. Favretto and P. Traldi (Padua, Italy)

A mixed-metal salt comprised of metal–metal bonded dinuclear ions: structure and properties of $[Rh_2(OAc)_2(MeCN)_6][Re_2Cl_8]$ 79
K.R. Dunbar, L.E. Pence and J.L.C. Thomas (East Lansing, MI, USA)

Transmetalation of targets $(\mu\text{-}Y)N_4Cu_2^ICu_2^{II}Cl_4$ and $(\mu\text{-}Y,\mu\text{-}O)N_4Cu_4Cl_4$ (Y = 3,4,5,6-tetrachlorocatecholate) with $M(NS)_2$ reagents. 85
K.Z. Ismail (Doha, Qatar), M.A. El-Sayed, A.-M. Al-Kouraty (Al-Ain, United Arab Emirates) and G. Davies (Boston, MA, USA)

Systematics of some properties of hexamolybdotellurate(VI) salt hydrates with di- and trivalent metals, $M_x[TeMo_6O_{24}]\cdot nH_2O$ 93
A. Saito (Tokyo, Japan)

Elsevier Sequoia

The anomalous EPR spectra of the iron(III) dichalcogenocarbamates 101
S. Yarish, N.V. Duffy, E. Gelerinter (Kent, OH, USA), W. Dietzsch, N. Law and R. Kirmse (Leipzig, Germany)

Unusually stable peroxocopper complexes. Stoichiometry, products and kinetics of oxidation of the dimeric copper(I) complex $[LCuBr]_2$ (L = *N,N'*-diethylethylenediamine) by dioxygen in methylene chloride from −51 to 30 °C 109
M.A. El-Sayed, K.Z. Ismail, T.A. El-Zayat (Alexandria, Egypt) and G. Davies (Boston, MA, USA)

Mercury and platinum mixed cluster having a prismatic structure, $[HgPt_6(2,6\text{-}Me_2C_6H_3NC)_{12}]$ 121
Y. Yamamoto (Chiba, Japan) and H. Yamazaki (Tokyo, Japan)

Synthesis and cyclic voltammetry of trinuclear selenido and tellurido clusters of nickel(II), palladium(II) and platinum(II) with 1,2-bis(diphenylphosphino)ethane and crystal structure of the tellurido cluster of platinum(II) 129
K. Matsumoto, M. Ikuzawa, M. Kamikubo and S. Ooi (Osaka, Japan)

Preparation and dioxygen binding property of a new zeolite encapsulated cobalt tetramethylporphin complex 135
G.Q. Li and R. Govind (Cincinnati, OH, USA)

Nucleophilic addition of water to coordinated di-(2-pyridyl)ketone (DPK) in rhenium(V) complexes. Synthesis and crystal structure of the adduct $(DPK\cdot H)^+[\{ReOCl_2(DPK\cdot OH)\}_2Cl]^-$ 141
G. Bandoli, A. Dolmella (Padua, Italy), T.I.A. Gerber, J.G.H. du Preez and H.J. Kemp (Port Elizabeth, South Africa)

Synthesis and characterization of Cd(II) complexes of cinoxacin. Crystal structure of a dicadmium complex containing two monoatomic-bridging carboxylate oxygen atoms. 149
M. Ruiz, R. Ortiz, L. Perelló (Burjassot, Valencia, Spain), S. García-Granda and M.R. Díaz (Oviedo, Spain)

Complexes of mercuric halides with the tripod ligand np_3 ($=N(CH_2CH_2PPh_2)_3$). Molecular structure of $[(np_3)HgI]I\cdot 0.5C_2H_5OH$. 155
F. Cecconi, C.A. Ghilardi, S. Midollini and A. Orlandini (Florence, Italy)

Molecular mechanical and quantum chemical study on the species involved in the hydrolysis of *cis*-diammine-dichloroplatinum(II) and substituted bis(ethylenediamine)dichloroplatinum(II) complexes
Part I. Reactants and products 159
G.St. Nikolov, N. Trendafilova (Sofia, Bulgaria), H. Schönenberger, R. Gust, J. Kritzenberger and H. Yersin (Regensburg, Germany)

Synthesis and characterization of symmetric and unsymmetric oxo-bridged trinuclear chromium benzoate complexes: crystal and molecular structure of $[Cr_3O(O_2CPh)_6(py)_3]ClO_4$ 171
A. Harton, M.K. Nagi, M.M. Glass, P.C. Junk, J.L. Atwood and J.B. Vincent (Tuscaloosa, AL, USA)

Solid-state isomerization of ruthenium(II) isocyanide complexes 181
K. Katsuki, Y. Ooyama, M. Okamoto and Y. Yamamoto (Chiba, Japan)

Notes

Synthesis and structure of $Zr_2Cl_4(\eta^6\text{-}C_6H_5PMe_2)_2(PMe_2Ph)_2$, an arene complex of zirconium(II) 187
F.A. Cotton and W.A. Wojtczak (College Station, TX, USA)

Functionalised phosphines: structure of bis(2-aminophenyldiphenylphosphine-κ^2N,P)copper(I) perchlorate ethanol solvate. 191
E.W. Ainscough, A.M. Brodie, S.L. Ingham and J.M. Waters (Palmerston North, New Zealand)

The synthesis and crystal structure of $[Cr(acacen)py_2][ZnCl_3py]$ 195
P.J. Toscano, P.T. DiMauro (Albany, NY, USA), S. Geremia, L. Randaccio and E. Zangrando (Trieste, Italy)

Synthesis of water-soluble (tri(hydroxymethyl)phosphine)gold(I) complexes containing a nucleoside ligand 201
S. Komiya, H. Awata, S. Ishimatsu and A. Fukuoka (Tokyo, Japan)

Synthesis and characterization of phosphane-substituted hydroxyruthenocenes: crystal structure of $[Ru(\eta^5\text{-}C_5H_4PPh_3)(\eta^5\text{-}C_5H_4OH)]PF_6$ 203
K. Kirchner, K. Mereiter, K. Mauthner and R. Schmid (Vienna, Austria)

Insertion reaction of dimethylacetylenedicarboxylate with the head-to-tail isomer of $Pt_2I_2(\mu\text{-}Ppy_3)_2$; Ppy_3 = tris(2-pyridyl)phosphine 209
L.Y. Xie and B.R. James (Vancouver, BC, Canada)

Nitrogen-15 NMR coordination shifts of β-alanine and glycine in cobalt(III) complexes 213
N. Juranić and S. Macura (Rochester, MN, USA)

1993 Table of standard atomic weights abridged to five significant figures 217
T.B. Coplen (Reston, VA, USA), N.N. Greenwood (Leeds, UK) and H.S. Peiser (Rockville, MD, USA)

Conference Calendar 219

Please note that Cumulative Author and Subject Indexes will be published annually. For 1994 they will appear at the end of Volume 227.

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. A leaflet describing our requirements is available from the publisher upon request.